DOCUMENT RESUME

ED 252 817 CS 007 882

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TITLE Performance of Rural Morenci, Michigan Fourth Grade Children from Low-Income Families on the Michigan Educational Assessment Program (MEAP) Test from 1980-1984 Compared to School and State Wide Averages.
PUB DATE [83]
NOTE 8p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Achievement Tests; Comparative Analysis; Elementary Education; Grade 4; Intermediate Grades; Mathematics Achievement; *Poverty; *Reading Achievement; *Reading Instruction; *Reading Research; *Rural Youth; *Socioeconomic Status
IDENTIFIERS Michigan

ABSTRACT

A study examined whether students coming from low income families perform less well on achievement tests than do students in general. Michigan Educational Assessment Program (MEAP) test scores of fourth grade students coming from low income, rural Michigan homes were compared to overall schoolwide and statewide average scores for the period 1980-84. Scores for 354 students, 104 classified as low income, were analyzed. Results indicated that, with the exception of 1980, math and reading scores for the low income students were lower than for those of the overall student population. The findings also revealed a trend toward declining performance of low income students over the years studied. (FL)

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ED252817

PERFORMANCE OF RURAL MORENCI, MICHIGAN FOURTH GRADE CHILDREN FROM LOW-INCOME FAMILIES ON THE MICHIGAN EDUCATIONAL ASSESSMENT PROGRAM (MEAP) TEST FROM 1980-1984 COMPARED TO SCHOOL AND STATE WIDE AVERAGES

Douglas Bower

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by Douglas Bower

INTRODUCTION

It is often assumed that children from low-income families, those that might be considered socioeconomically deprived, are less intellectual or perform in school less well than those children from families with greater incomes (Milne, 1983). Whether this concept is based on the idea that children from lower income homes are provided with fewer educationally oriented experiences that might enhance their school performance (Kirsh and Guthrie, 1977), or that they are less intellectually able based on the idea that their parents' incomes are reflective of their own intellectual abilities thus an inherent factor, is beyond the scope of this paper. A good deal of research exists that deals with these concepts yet most are racially tainted and include black or non-white performance comparisons to Caucasian students or performances of racially mixed school systems.

Generally, though, it might be expected that for whatever reason children from low-income homes would perform less well on achievement tests (ETS, 1980). This brief research, though inconclusive, makes this very assumption and its results imply that children from low-income families do, in fact, perform less well than students on the whole.

METHODOLOGY

In order to test this hypothesis that low-income students do perform less well on achievement tests, MEAP average

test scores of fourth grade students coming from low-income homes were compared to overall school wide and state wide average scores. The percentage of students mastering 75 percent or more of the MEAP tests' minimum objectives were placed in category of achievement 4. Those achieving between 50 percent and 75 percent are reflected in category 3, between 25 and 50 percent in category 2 and 25 percent or less are presented in category 1 (Michigan State Board of Education, 1980). The MEAP test scores are designed to test the minimal performance objectives for communication skills and mathematics as approved by the State Board of Education (Michigan State Board of Education, 1983).

Students were determined to be from low-income homes if their families qualified for the State of Michigan school free lunch program. A sample over a four year period of 354 fourth grade students from rural Morenci, Michigan was used of which 104 qualified for the free lunch program.

RESULTS

With the exception of 1980, the results of this comparative study show lower math and reading scores for students from low-income families than school and state wide overall student averages. When comparing the percentage of low-income students who attained category 4 to school and state wide averages in math in 1980, it was found that 3.4 percent fewer of the low-income student sample satisfied the criteria to attain category 4 compared to the school wide sample and .1 percent more satisfied the criteria than the state sample. In reading for the same year the low-income students

had 1.7 percent more students in their sample scoring in category 4 than the school wide sample had and 14.6 more than the state.

The following years within the scope of this study show a different result. In 1981, in math, there were 11.1 percent more low-income students not able to attain category 4 than students school wide and 14.2 percent more than students state wide. In reading for the same year there were 7.8 percent fewer students from the sample scoring below category 4 than school wide and 17.9 percent fewer than state wide.

In 1982 26 percent fewer of the low-income sample of students rated category 4 in math than did in the school wide sample and 19.2 percent fewer than in the state wide sample. In reading 10.7 percent of the sample of low-income students scored lower than the 75 percent or over category than did students in the school wide sample and 14.9 percent fewer than in the state wide.

In the 1983 samples 24.3 percent fewer low-income students achieved the category 4 level in math than school wide and 34.4 percent fewer than state wide. In reading 29.9 percent fewer low-income students scored in category 4 than school wide and 37.4 percent fewer than the state wide.

DISCUSSION

Again, as noted, the 1980 results of this study did show a higher percentage of low-income students reaching category 4 in reading as compared to the school and state wide students in the sample. This, and the close proximity of scores for the same year in math, may well reflect the size of the low-income sample and the few students it would take to inflate the results.

On the whole, however, students of low-income families, with

the exception of 1980, did score on the average much lower in math and reading than students school and state wide. The implication here is clear. Low-income students do, in fact, perform less well on achievement tests than students as a whole and as a result will probably do less well in school.

So, what then is inferred in the long term for these students? Loss of enthusiasm and drive in the institutional setting and few educationally oriented successes would seem to be a reasonable prophecy. This, coupled with the fact that long term earning growth tends to slow and cease after high school for those from poorer economic origins, contrasts a continued, almost linear path among those from high income families (Hauser and Daymont, 1975).

Also evident in this research is a definite trend toward declining performance of students from low-income families on the MEAP test as the years progress. The test has not changed over the years researched in this study. This suggests, assuming that teaching efforts remain consistent, that the economic standards and related stresses are worsening for low-income families and will increase the depressed academic and long term economic state for these children and many others in the future.

1980-1981

	MATH				READING			
C	#Kid	LI	ScA	StA	#Kid	LI	ScA	StA
4	21	72.4	75.8	72.3	24	82.8	81.1	70.7
3	7	24.1	22.1	18.6	4	13.8	12.6	13.6
2	1	3.4	2.1	6.8	1	3.4	4.2	9.6
1				2.2			2.1	6.1

1981-1982

	MATH				READING			
C	#Kid	LI	ScA	StA	#Kid	LI	ScA	StA
4	12	60	71.1	74.2	11	55	61.8	72.9
3	6	30	14.5	17.9	3	15	18.4	13
2	1	5	9.2	5.8	4	20	10.5	8.8
1	1	5	5.3	2.1	2	10	9.2	5.3

1982-1983

	MATH				READING			
4	17	58.6	66.7	77.8	17	60.7	70	75.6
3	7	24.1	23.5	15.9	5	17.8	12.5	12.3
2	4	13.7	7.4	4.7	5	17.8	15	7.8
1	1	3.4	2.5	1.5	1	3.6	2.5	4.2

1983-1984

	MATH				READING			
4	12	46.1	70.4	80.5	10	38.5	68.4	75.9
3	14	53.8	27.6	14.6	5	19.2	16.3	12.3
2			2	3.9	8	30.8	10.2	7.8
1				1	3	11.5	5.1	3.9

Key-

C - Category of Achievement

LI - Low-Income Students

ScA - School Average

StA - State Average

#Kid - Number of students participating in low-income student sample

*in percentages

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